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Lake Valley aquifer. Salt Lake City would be pleased to discuss this research project and its relevance to the Plan with you at your convenience.

## 2.1.2 Sub-Regional Groundwater Withdrawals from the Principle Aquifer

We agree that the proposed geographic limit of this sub-region reasonably reflects the unique hydrogeologic conditions and degree of groundwater development with the sub-region. However, Salt Lake City recommends that the allowable relative withdrawal of the Eastern Sub-region be increased from 70 percent to at least 80 percent of the total Eastern Region allowable withdrawal. This sub-region constitutes over 72 percent of the entire Eastern Region surface area, but contains a significantly larger percent of the basin fill material and respective aquifer storage capacity. Technical Publication 31 indicates that the majority of natural recharge to the Eastern Region originates from Big Cottonwood and Little Cottonwood watershed, which is tributary to the Eastern Sub-region. The "dense groundwater withdrawals" located within the Eastern Sub-region give empirical proof of the greater hydrogeologic capacity of this area over the Western Region and south end of the Eastern Region.

## 2.1.3 Localized Groundwater Withdrawals from the Eastern Region

Salt Lake City believes there are several scientific, legal and administrative problems associated with the local "management square" proposal in its current form. These issues are listed below, followed by a detailed discussion of each item.

- a) The definition and respective groundwater withdrawal limits for each local management area should reflect the actual hydrogeologic and water quality limitations of the respective area, rather than limited by a generic value such as 12,000 af/yr.
- b) The Plan should protect and preserve priority water rights under the Doctrine of Prior Appropriation.
- c) Administration and policy of local management areas should not promote speculation and applications in management areas with undeveloped groundwater.

## Recognition of Local Variances in Hydrogeologic Properties

By assigning a maximum withdrawal of 12,000 af/yr per management square, regardless of location, the proposed Plan assumes homogeneous hydrogeologic properties throughout the Eastern Region. This assumption, and the respective management withdrawal limits, should be revised to acknowledge the varying production capacity of the aquifer within each local management area or "square". The current concentration of well development within certain areas is proof of the physical differences and capacity of the localized areas of the aquifer. Figure 7 of Publication 110-B shows transmissivities nearly ten times higher in areas with existing dense well development relative to adjacent areas. Water rights within these areas should not be penalized for being in a high production area of the aquifer.

This approach is consistent with the Plan objective for maximum utilization of the groundwater resource while preserving water quality of the principle aquifer. We agree